

## Section 1. Registration Information

### Source Identification

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Facility Name: ACS-LLC  
Parent Company #1 Name:  
Parent Company #2 Name:

### Submission and Acceptance

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Submission Type: Re-submission  
Subsequent RMP Submission Reason: 5-year update (40 CFR 68.190(b)(1))  
Description: Contact correction 07  
Receipt Date: 16-Nov-2011  
Postmark Date: 16-Nov-2011  
Next Due Date: 16-Nov-2016  
Completeness Check Date: 16-Nov-2011  
Complete RMP: Yes  
De-Registration / Closed Reason:  
De-Registration / Closed Reason Other Text:  
De-Registered / Closed Date:  
De-Registered / Closed Effective Date:  
Certification Received: Yes

### Facility Identification

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EPA Facility Identifier: 1000 0018 5685  
Other EPA Systems Facility ID:

### Dun and Bradstreet Numbers (DUNS)

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Facility DUNS: 148858426  
Parent Company #1 DUNS:  
Parent Company #2 DUNS:

### Facility Location Address

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Street 1: 4102 S. Avenue 3 1/2 E  
Street 2:  
City: Yuma  
State: ARIZONA  
ZIP: 85365  
ZIP4:  
County: YUMA

### Facility Latitude and Longitude

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Latitude (decimal): 32.652450  
Longitude (decimal): -114.572720  
Lat/Long Method: GPS Code Measurements (Psuedo Range) Precise Positioning Service  
Lat/Long Description: Plant Entrance (General)  
Horizontal Accuracy Measure: 1  
Horizontal Reference Datum Name: World Geodetic System of 1984  
Source Map Scale Number:

## Owner or Operator

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Operator Name: ACS-LLC  
Operator Phone: (928) 726-8745

## Mailing Address

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Operator Street 1: 4102 S. Avenue 3 1/2 E  
Operator Street 2:  
Operator City: Yuma  
Operator State: ARIZONA  
Operator ZIP: 85365  
Operator ZIP4:  
Operator Foreign State or Province:  
Operator Foreign ZIP:  
Operator Foreign Country:

## Name and title of person or position responsible for Part 68 (RMP) Implementation

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RMP Name of Person: Gary Anthony  
RMP Title of Person or Position: General Manager  
RMP E-mail Address: ganthony@acscool.com

## Emergency Contact

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Emergency Contact Name: Gary Anthony  
Emergency Contact Title: General Manager  
Emergency Contact Phone: (928) 726-8745  
Emergency Contact 24-Hour Phone: (928) 941-2073  
Emergency Contact Ext. or PIN:  
Emergency Contact E-mail Address: ganthony@acscool.com

## Other Points of Contact

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Facility or Parent Company E-mail Address:  
Facility Public Contact Phone:  
Facility or Parent Company WWW Homepage  
Address:

## Local Emergency Planning Committee

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LEPC: Yuma County LEPC

## Full Time Equivalent Employees

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Number of Full Time Employees (FTE) on Site: 30  
FTE Claimed as CBI:

## Covered By

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OSHA PSM : Yes  
EPCRA 302 : Yes  
CAA Title V:

Air Operating Permit ID:

## OSHA Ranking

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OSHA Star or Merit Ranking:

## Last Safety Inspection

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Last Safety Inspection (By an External Agency) Date:	21-Oct-2010
Last Safety Inspection Performed By an External Agency:	EPA

## Predictive Filing

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Did this RMP involve predictive filing?:

## Preparer Information

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Preparer Name:	The Cloud Co./Ray Cloud
Preparer Phone:	(805) 925-0265
Preparer Street 1:	P.O. Box 2568
Preparer Street 2:	
Preparer City:	Orcutt
Preparer State:	CALIFORNIA
Preparer ZIP:	93457
Preparer ZIP4:	2568
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

## Confidential Business Information (CBI)

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CBI Claimed:  
Substantiation Provided:  
Unsanitized RMP Provided:

## Reportable Accidents

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Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.
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## Process Chemicals

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Process ID:	1000030294
Description:	Ammonia Refrigeration
Process Chemical ID:	1000036398
Program Level:	Program Level 3 process
Chemical Name:	Ammonia (anhydrous)
CAS Number:	7664-41-7
Quantity (lbs):	28070
CBI Claimed:	
Flammable/Toxic:	Toxic

## Process NAICS

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Process ID:	1000030294
Process NAICS ID:	1000030616
Program Level:	Program Level 3 process
NAICS Code:	49312
NAICS Description:	Refrigerated Warehousing and Storage

## Section 2. Toxics: Worst Case

Toxic Worst ID: 1000025082

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Percent Weight:	100.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Rural

### Passive Mitigation Considered

Dikes:  
Enclosures:  
Berms:  
Drains:  
Sumps:  
Other Type:

## Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000026913

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Percent Weight:	100.0
Physical State:	Gas liquified by pressure
Model Used:	Areal Locations of Hazardous Atmospheres [ALOHA(R)]
Wind Speed (m/sec):	0.8
Atmospheric Stability Class:	F
Topography:	Rural

### Passive Mitigation Considered

Dikes:  
Enclosures:  
Berms:  
Drains:  
Sumps:  
Other Type:

### Active Mitigation Considered

Sprinkler System:  
Deluge System:  
Water Curtain:  
Neutralization:  
Excess Flow Valve:  
Flares:  
Scrubbers:  
Emergency Shutdown:  
Other Type:

## **Section 4. Flammables: Worst Case**

No records found.

## **Section 5. Flammables: Alternative Release**

No records found.



## Section 6. Accident History

No records found.

## Section 7. Program Level 3

### Description

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Ammonia Refrigeration Closed-Loop Process

### Program Level 3 Prevention Program Chemicals

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Prevention Program Chemical ID:	1000031245
Chemical Name:	Ammonia (anhydrous)
Flammable/Toxic:	Toxic
CAS Number:	7664-41-7

Prevention Program Level 3 ID:	1000026221
NAICS Code:	49312

### Safety Information

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Safety Review Date (The date on which the safety information was last reviewed or revised):	14-Nov-2011
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### Process Hazard Analysis (PHA)

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PHA Completion Date (Date of last PHA or PHA update):	14-Nov-2011
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### The Technique Used

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What If:	Yes
Checklist:	
What If/Checklist:	
HAZOP:	
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	31-Dec-2011

### Major Hazards Identified

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Toxic Release:	Yes
Fire:	Yes
Explosion:	
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	Yes
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	Yes
Floods (Flood Plain):	

Tornado:  
Hurricanes:  
Other Major Hazard Identified:

## Process Controls in Use

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Vents:  
Relief Valves: Yes  
Check Valves: Yes  
Scrubbers:  
Flares:  
Manual Shutoffs: Yes  
Automatic Shutoffs: Yes  
Interlocks: Yes  
Alarms and Procedures: Yes  
Keyed Bypass:  
Emergency Air Supply:  
Emergency Power:  
Backup Pump:  
Grounding Equipment:  
Inhibitor Addition:  
Rupture Disks:  
Excess Flow Device:  
Quench System:  
Purge System:  
None:  
Other Process Control in Use:

## Mitigation Systems in Use

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Sprinkler System:  
Dikes:  
Fire Walls:  
Blast Walls:  
Deluge System:  
Water Curtain:  
Enclosure:  
Neutralization:  
None:  
Other Mitigation System in Use: Ammonia-Water Diffusion System

## Monitoring/Detection Systems in Use

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Process Area Detectors: Yes  
Perimeter Monitors:  
None:  
Other Monitoring/Detection System in Use:

## Changes Since Last PHA Update

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Reduction in Chemical Inventory:  
Increase in Chemical Inventory:  
Change Process Parameters:  
Installation of Process Controls:  
Installation of Process Detection Systems:

Installation of Perimeter Monitoring Systems:

Installation of Mitigation Systems:

None Recommended:

None:

Other Changes Since Last PHA or PHA Update:

Upgrades to SOP's, Training, Security, Traffic Control &amp; Barriers

## Review of Operating Procedures

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Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):

02-Oct-2011

## Training

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Training Revision Date (The date of the most recent review or revision of training programs):

19-Oct-2010

## The Type of Training Provided

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Classroom:

On the Job:

Yes

Other Training:

Online, RETA-Qualified Vendor Training

## The Type of Competency Testing Used

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Written Tests:

Yes

Oral Tests:

Demonstration:

Yes

Observation:

Yes

Other Type of Competency Testing Used:

## Maintenance

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Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):

19-Oct-2010

Equipment Inspection Date (The date of the most recent equipment inspection or test):

31-Oct-2011

Equipment Tested (Equipment most recently inspected or tested):

R56 Critical Items

## Management of Change

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Change Management Date (The date of the most recent change that triggered management of change procedures):

18-Oct-2004

Change Management Revision Date (The date of the most recent review or revision of management of change procedures):

19-Oct-2010

## Pre-Startup Review

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Pre-Startup Review Date (The date of the most recent pre-startup review):

## Compliance Audits

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Compliance Audit Date (The date of the most recent compliance audit): 19-Oct-2010

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 29-Apr-2011

## Incident Investigation

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Incident Investigation Date (The date of the most recent incident investigation (if any)): 19-Nov-2009

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation): 19-Nov-2009

## Employee Participation Plans

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Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 19-Oct-2010

## Hot Work Permit Procedures

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Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 19-Oct-2010

## Contractor Safety Procedures

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Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 19-Oct-2010

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 01-Nov-2011

## Confidential Business Information

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CBI Claimed:

## **Section 8. Program Level 2**

## Section 9. Emergency Response

### Written Emergency Response (ER) Plan

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Community Plan (Is facility included in written community emergency response plan?): Yes

Facility Plan (Does facility have its own written emergency response plan?):

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):

Healthcare (Does facility's ER plan include information on emergency health care?):

### Emergency Response Review

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Review Date (Date of most recent review or update of facility's ER plan):

### Emergency Response Training

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Training Date (Date of most recent review or update of facility's employees):

### Local Agency

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Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): City of Yuma Fire Department

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (928) 373-4850

### Subject to

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OSHA Regulations at 29 CFR 1910.38: Yes

OSHA Regulations at 29 CFR 1910.120:

Clean Water Regulations at 40 CFR 112:

RCRA Regulations at CFR 264, 265, and 279.52:

OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:

State EPCRA Rules or Laws: Yes

Other (Specify):

## Executive Summary

### EXECUTIVE SUMMARY

#### SCOPE

The EPA RMP regulation requires that an Executive Summary be provided as part of the RMP Submittal; this submittal is part of the required 5-year update of the RMP. The re-submittal is being executed via the USEPA RMP eSubmit website and includes updates and corrections to all nine sections of the RMP submittal report.

#### ACCIDENTAL RELEASE PREVENTION AND EMERGENCY RESPONSE POLICIES

It is ACS' policy to comply with all of the regulatory requirements of the EPA Risk Management Program (RMP). ACS has developed their RMP/PSM Manual to document policies addressing the implementation of these regulations. The Process Safety Management (PSM) sections pertain to the prevention of accidental releases and include the Process Hazard Analysis (PHA) study, procedures for operating, training, maintenance, emergency response, and others. The RMP sections pertain to management systems, accident history and include the Hazard Assessment (Offsite Consequence Analysis-OCA) Report. The OCA was modified in the cycle due to newer versions of modeling software, and slightly different parameters.

ACS has adopted an overall "Non-responding facility" policy; employees are to notify and evacuate in the event of an emergency situation. ACS has performed coordination activities with the local Fire Department, which inspects the facility on a periodic basis. ACS is also supported by Western Precooling Systems (WPS) which has 1910.120(q) trained technicians. These technicians are on-call to the facility and are intended to support the Fire Dept. during an emergency situation.

#### STATIONARY SOURCE ACTIVITIES AND REGULATED SUBSTANCES HANDLED

ACS - LLC is an Arizona Limited Liability Company consisting of Western Precooling Systems-50% and Vic Smith 50%. The ACS facility is located in an industrial area of Yuma and provides product cooling and short-term storage for fresh vegetables. Ammonia is used as the refrigerant in the Main Refrigeration System (System). This is a direct, mechanical refrigeration system, built in 2001 to the latest codes and standards in use at that time. The facility was put into operation in November of 2001 and is permitted. The majority of the ammonia equipment is located outside. Cold Room evaporators are located inside; however, their associated valves and piping are located on the roof. The facility was expanded in 2004 according to the codes and standards in effect at that time.

A portion of the ammonia equipment is portable and is moved on and off site annually as needed for the local produce season. The interconnecting piping between the portable components is permanently mounted. Additionally some vessels and the Cold Room evaporators are permanently mounted.

#### PREVENTION PROGRAM

ACS's Prevention Program is described in the RMP/PSM Manual. The RMP Prevention Program is very similar to OSHA's PSM Program. The Prevention Program implemented by ACS is essential to help prevent releases and to minimize the effects if a release does occur.

Key Objectives of ACS's Prevention Program are briefly described below:

1. Maintain current and complete refrigeration system technical information (Addressed under the Process Safety Information Chapter).
2. Provide thorough team evaluation of the refrigeration system (Process Hazard Analysis-PHA). The evaluation considers a number of potential problems including: mechanical problems, human errors, and external events (e.g. earthquakes). Safety recommendations developed by the team are reviewed and addressed by ACS (addressed under PHA chapter). The PHA was updated and revalidated in November 2011, by a team representing management, engineering, operations and maintenance.
3. Written procedures (SOP's) and policies that establish how the refrigeration system should be operated and maintained, and how to investigate accidental releases or a "near miss" (addressed under Operating Procedures, Mechanical Integrity, and Incident Investigation chapters).



4. Certification of refrigeration operators to safely operate the refrigeration system. ACS certifies operators following completion of operator training and ACS's confirmation of the operator's ability to apply what they have learned (addressed under Training chapter). ACS' training program is augmented with a highly qualified vendor that is a RETA-Certified Industrial Refrigeration Operator (CIRO). ACS employees have also completed RETA training.
5. Employee involvement in the Prevention Program. This is addressed on two levels. First, refrigeration equipment operators participate in the planning and evaluation of the Prevention Program (e.g. PHA study team, writing and/or reviewing operating procedures, Incident Investigation team, etc.). This involvement encourages ownership of the Prevention Program and positively affects the operators' day-to-day activities. Second, all ACS employees (direct hires and contract) at this facility are to receive ammonia awareness training. Additionally, they have access to the RMP/PSM information. These activities are to improve the overall safety of the employees (both levels are addressed under Employee Participation chapter).
6. Implementation of additional measures when changes are planned (procedural or mechanical). These measures begin before any changes are made and may include a PHA, operator training, and Process Safety Information updates plus other measures required by ACS's Management of Change Procedure. If a mechanical change is required and for maintenance contracts, ACS has a procedure for selecting a contractor based on the company's experience and safety history. Additionally, if welding, grinding, or other "Hot Work" occurs inside the building and close to the refrigeration system, an ACS Hot Work permit is required. The purpose of the permit and associated Hot Work procedure is to minimize the possibility of a fire. Following completion of a mechanical change, a pre-startup safety review is required before the system can be started. (These areas are addressed under Management of Change, Contractor Qualifications, Hot Work Permit, and Pre-Start-up Safety Review).
7. Verification of ACS's compliance with the RMP/PSM program. This self-audit process is an important tool to confirm whether each of the elements in the Prevention Program (and RMP) has been implemented and properly documented by ACS personnel. ACS has established a Management System procedure to address any shortcomings which the audit may find (addressed under Compliance Audits).

#### Chemical-specific Prevention Steps

Ammonia-specific release prevention measures include:

- Automatic Cutouts and Isolation Valves: Pressure and temperature controls are installed in accordance with appropriate standards. Refrigerating equipment includes automated cut-outs and isolation valves. The cut-outs are designed to shut down equipment prior to out-of-tolerance conditions being met. Isolation valves would help limit the impact of a release scenario.
- Monitoring System: The refrigeration system is equipped with ammonia sensors and an independently monitored alarm system.
- Ammonia Diffusion System: Pressure Relief Valves (PRV) are piped to an ammonia-water diffusion system. If a PRV were to operate due to an over-pressure situation, the ammonia would be captured in the water tank.
- Self-closing valves are installed at process oil draining points
- Refrigerating equipment is protected via barriers and equipment placement (siting) practices
- Ammonia storage is protected with an evaporative cooling system (reduce temperature and pressure during very hot weather).
- Security Program: ACS has established a comprehensive food safety program that includes provisions for security, including closed-circuit television (CCTV's) and monitoring. Entrance to the facility is closely monitored and limited. Fencing, gates and retention basins around the facility perimeter help prevent un-authorized entry.

#### FIVE YEAR ACCIDENT HISTORY

There have been no qualified incidents in the last five years. There is no data to report.

#### EMERGENCY RESPONSE PROGRAM

ACS's Emergency Response Program is described within the RMP /PSM Manual. An Emergency Action Plan has been established for the facility. This plan includes planned activities and procedures for evacuations, notifying responders and governmental agencies. The plan also includes first aid procedures for immediate care and instructions for follow-up medical care when necessary. The plan addresses training requirements for employees including production employees, supervisors, managers, and operators. Evacuation drills are an important part of the training. The facility emergency plan is reviewed and appropriate updates submitted annually to the AZ State Emergency Response Commission (SERC), the Yuma County Local Emergency Planning Committee (LEPC) and the City of Yuma Fire Department. The City Fire Department has been involved with the facility since its opening (via the permitting process) and makes periodic visits. Coordination with these Agencies is accomplished in this way. ACS

is also a co-sponsor of the Yuma Area Ammonia Safety Day. This is an annual event that promotes safety, training and a strong working relationship between Regulatory Agencies, the local Ammonia Refrigeration Industry and the Public.

Under ACS's Emergency Response policy, ACS employees who have been trained as "First Responder-Awareness" may initially respond to releases that can be addressed without entering the danger area (i.e. de-energizing equipment). ACS will evacuate the affected area, begin notification process, and rely on qualified responders (e.g., the fire department, portable ammonia equipment supplier and/or refrigeration contractor).

#### PLANNED CHANGES TO IMPROVE SAFETY

Planned Changes to Improve Safety are achieved through the continued implementation of the Plant's RMP/PSM Program. Mechanisms include, but are not limited to: Compliance Audits, PHA revalidations/updates, Mechanical Integrity inspections and maintenance, including IIAR Bulletin 109 Inspections by qualified personnel. The PHA revalidation study team recently developed new recommendations to improve safety and to reduce the possibility of a release. Key recommendations identified during the study included:

- Confirm lockouts;
- Check water supply locks;
- Tag critical piping with warning labels;
- Evaluate certain piping changes to improve safety;
- Validate seasonal traffic patterns and barriers;
- Confirm equalizing valve(s);
- Replace/upgrade certain valves;
- Check R24 for bearing distress;
- Confirm oil return loop safety (two-stage Renco);
- Critical Item Inspection for Room Evaporators.

ACS has developed a schedule to document the implementation of the recommendations. Management is to periodically review and assess progress until completed.

Changes since the last PHA include improvements to:

- SOP & associated training
- Traffic patterns and barriers
- Maintenance & Inspections
- Security (Fencing & CCTV's)
- Food Safety Program